



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,086	03/15/2004	N. Stephen Ober	17101.0003U2	9464

23859 7590 12/08/2006

NEEDLE & ROSENBERG, P.C.  
SUITE 1000  
999 PEACHTREE STREET  
ATLANTA, GA 30309-3915

EXAMINER
----------

MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
----------	--------------

2165

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/801,086	OBER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tony Mahmoudi	2165	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/17/2004</u> .   | 6) <input type="checkbox"/> Other: ____                           |

## DETAILED ACTION

### *Priority*

1. The instant application claims benefit of the filing date and priority (continuation) to the U.S. Non-Provisional Patent Application S/N 09/665,420, filed on 20-September-2000, which claims the benefit of U.S. Provisional Patent Application S/N 60/154,726, filed on 20-September-1999. Accordingly, the filing date of the Provisional Patent Application (20-September-1999) is considered the effective filing date for the examination of the instant application.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 7 recite functional limitations following the term “*for*” (e.g., “a first data store *for storing* at least one record”, in claims 1 and 7; and “a processor *for performing* the steps of”, in claim 1, which render the claims indefinite.

Functional limitations following the term *for* are indicative only of “intended use”. The Examiner cannot clearly establish whether the functions of “storing” and performing” following the term *for* are indeed required functionality of the claimed invention.

The Applicant can overcome this rejection by amending the above claims to recite the limitations of “storing” and “performing” in definitive forms (e.g., a first data store *that stores* at least one record”, and, “a processor *that performs* the step of”).

Appropriate corrections are required.

#### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 2165

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Independent claims 1, 7 and 8 of the instant application are rejected under the judicially created doctrine of double patenting over claims 1, 5 and 6 (respectively) of Ober et al (U.S. Patent No. 6,732,113 B1) since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

INSTANT APPLICATION 10/801,086	OBER et al. US 6,732,113B1
<p><b>1. A system for creating a unique alias associated with an individual identified in a health care database, comprising:</b></p> <p><b>(a) a first data store for storing at least one record, each record including a plurality of identification fields which when taken together uniquely identify an individual, and at least one health care field corresponding to health care data associated with the individual;</b></p> <p><b>(b) a second data store; and</b></p> <p><b>(c) a processor for performing the steps of:</b></p>	<p><b>1. A system for creating a unique alias associated with an individual identified in a health care database, comprising:</b></p> <p><b>(a) a plurality of first data stores at different locations from one another, each first data store for storing a plurality of records, each record including a plurality of identification fields which when taken together uniquely identify an individual, and at least one health care field corresponding to health care data associated with the individual;</b></p> <p><b>(b) means, associated with each first data store, for creating a file having a plurality of records selected from the first data store; and</b></p> <p><b>(c) a plurality of processors, each processor associated with one of the first data stores for performing the steps of:</b></p>

<p>(i) selecting a record of the first data store;</p> <p>(ii) selecting a subset of the plurality of identification fields within the selected record;</p> <p>(iii) concatenating the selected subset of identification fields; and</p> <p>(iv) storing in a record in the second data store <b>the concatenated identification fields</b> as well as the at least one health care field from the selected record of the first data store.</p>	<p>(i) selecting a record of the file;</p> <p>(ii) selecting a subset of the plurality of identification fields within the selected record;</p> <p>(iii) concatenating the selected subset of identification fields;</p> <p>(iv) encrypting <b>the concatenated identification fields</b> to define a unique alias;</p> <p>(v) replacing, with the unique alias, fields of the file that uniquely identify an individual, and deleting any remaining fields of the file that uniquely identify an individual;</p> <p>(vi) repeating steps (i)-(v) for all records of the file; and</p> <p>(vii) following steps (i)-(vi), transmitting the file to <b>a second data store</b> at a location remote from that of the first data store and its associated processor via a secure data communications network.</p>
<p>7. A system for creating a unique alias associated with an individual identified in a health care database, the database including a first data store for storing at least one record, each record including a plurality of identification fields which when taken together uniquely identify an individual, and at least one health care field corresponding to health care data associated with the individual, and a second data store, the system comprising:</p>	<p>5. A system for creating a unique alias associated with an individual identified in a health care database, the database including a plurality of first data stores at different locations from one another, each <b>first data store</b> for storing a plurality of records, each record including a plurality of identification fields which when taken together uniquely identify an individual, and at least one health care field corresponding to health care data associated with the individual, and a second data store at a location remote from those of the first data stores, the system comprising:</p>

<p><b>(a) means for selecting a subset of the plurality of identification fields;</b></p> <p><b>(b) means for concatenating the selected subset of identification fields; and</b></p> <p><b>(c) means for storing in a record in the second data store the concatenated identification fields as well as the at least one health care field from the selected record of the first data store.</b></p>	<p><b>(a) means associated with each of the first data stores for selecting a subset of the plurality of identification fields;</b></p> <p><b>(b) means associated with each of the first data stores for concatenating the selected subset of identification fields; and</b></p> <p><b>(c) means associated with each of the first data stores for encrypting the concatenated identification fields to define a unique alias;</b></p> <p><b>(d) means associated with each of the first data stores for storing in a record in a file the unique alias as well as the at least one health care field from the selected record of the first data store, and for removing any fields of the file that uniquely identify an individual; and</b></p> <p><b>(e) means for transmitting the file to the second data store for storage.</b></p>
<p><b>8. A method for creating a unique alias associated with an individual identified in a health care database, wherein the health care database stores at least one record, each record including a plurality of identification fields which when taken together uniquely identify an individual, and at least one health care field corresponding to health care data associated with the individual, the method comprising the steps of:</b></p> <p><b>(a) selecting a record within the health care database;</b></p> <p><b>(b) selecting a subset of the plurality of identification fields within the selected record;</b></p>	<p><b>6. A method for creating a unique alias associated with an individual identified in one of a plurality of health care databases at different locations from one another, wherein each health care database stores a plurality of records, each record including a plurality of identification fields which when taken together uniquely identify an individual, and at least one health care field corresponding to health care data associated with the individual, the method comprising the steps of:</b></p> <p><b>(a) selecting a record within one of the health care databases;</b></p> <p><b>(b) selecting a subset of the plurality of identification fields within the selected record;</b></p>

<p><b>(c) concatenating the selected subset of identification fields; and</b></p> <p><b>(d) storing in a record in a second database the concatenated identification fields as well as the at least one health care field from the selected record of the first data store.</b></p>	<p><b>(c) concatenating the selected subset of identification fields;</b></p> <p><b>(d) encrypting the concatenated identification fields to define a unique alias; and</b></p> <p><b>(e) storing in a record in a file the concatenated identification fields as well as the at least one health care field from the selected record of the first data store and removing any fields of the file that uniquely identify an individual; and</b></p> <p><b>(f) transmitting the file to a second data store for storage.</b></p>
---	---

As shown above, claims 1, 5 and 6 of Ober et al (U.S. Patent No. 6,732,113 B1) contains at least the elements of claims 1, 7 and 8 of the instant application and as such anticipates claims 1, 7 and 8 of the instant application.

“A later application claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus).” ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).



*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes et al (U.S. patent No. 5,666,492, hereinafter, Rhodes) in view of Hoover et al (U.S. patent No. 5,724,575, hereinafter, Hoover.)

As to claim 1, Rhodes teaches a system for creating a unique alias associated with an individual identified in a health care database (see column 3, lines 35-41, where “health care database” is read on “pharmaceutical care cognitive services management system’s data storage device”), comprising:

- (a) a first data store (see column 7, lines 59-60) for storing at least one record (see column 8, lines 12-17), each record including a plurality of identification fields which when taken together uniquely identify an individual (see figure 4D), and at least one health care field corresponding to health care data associated with the individual (see figure 4E);
- (b) a second data store (see column 7, lines 59-60); and
- (c) a processor (see column 2, lines 65-66) for performing the steps of:

Art Unit: 2165

- (i) selecting a record of the first data store (see column 10, lines 38-49, where “selecting a record” is read on “locating a patient”);
- (ii) selecting a subset of the plurality of identification fields within the selected record (see column 11, lines 8-30);
- (iv) storing in a record in the second data store (see column 3, lines 35-41) the concatenated identification fields (see figure 4D) as well as the at least one health care field from the selected record of the first data store (see figure 4E.)

**Rhodes** does not teach:

- (iii) concatenating the selected subset of identification fields.

**Hoover** teaches an object-based relational distributed database system (see Abstract), in which he teaches concatenating the selected subset of identification fields (see column 39, lines 49-52, and column 42, lines 14-19.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified **Rhodes** by the teaching of **Hoover**, because concatenating the selected subset of identification fields would enable the user to selectively associate various fields in a patient information database, used to identify a patient, with fields from another database (or another section of the same database) relating to the medical history and/or diagnostic recommendations for the patient, for submitting the concatenated information to desirable service providers and/or authorized viewers of the information.

Art Unit: 2165

As to claim 2, Rhodes as modified teaches health care data (see Rhodes, column 3, lines 41-45, where “health care data” is read on “patient’s drug use history”) stored within the first data store (see Rhodes, column 3, lines 45-47, where “first data store” is read on “data storage device”).

Rhodes as modified does not teach wherein the data corresponds to pharmaceutical claims data.

Hoover, in another embodiment of his invention, teaches wherein the data corresponds to pharmaceutical claims data (see column 11, lines 10-15, where “pharmaceutical claims data” is covered in “insurance claim processing”).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rhodes as modified, to include the data to correspond to pharmaceutical claims data, because having the data correspond to pharmaceutical claims data would enable the system to cover a wider aspect of patient services and be able to process patients’ prescription claims as well as providing patients’ identities and related medical history, recommendations, diagnostics, etc.

As to claim 3, Rhodes as modified teaches wherein the first data store and the second data store are both located within the same database (see Rhodes, figure 1, and see column 2, lines 65-66, where “the same database” is read on “a data storage device”).

As to claim 4, Rhodes as modified does not teach wherein the first data store and the second data store are both located within different databases.

Hoover further teaches wherein the first data store and the second data store are both located within different databases (see Abstract, and see column 5, lines 46-56.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rhodes as modified, with the further teaching of Hoover, because having the first data store and the second data store both located within different databases, enables the system to access and retrieve patient data remotely in addition to from the local database. For example, if a patient's medical history is distributed in multiple remote databases (in cities or countries in which the patient may have visited or lived before), the system can easily access and retrieve historical data from the remote databases, concatenate the desired information pieces, and store the result locally for desired use.

As to claim 5, Rhodes as modified teaches wherein the selected subset comprises last name, birthday and gender (see Rhodes, figure 6, where patient's general information tab consists of patient's last name, gender, birth date, and various other information fields about the patient.)

As to claim 7, Rhodes teaches a system for creating a unique alias associated with an individual identified in a health care database (see column 3, lines 35-41, where "health care database" is read on "pharmaceutical care cognitive services management system's data storage device"), the database including a first data store (see column 7, lines 59-60) for storing at least one record (see column 8, lines 12-17), each record including a plurality of

Art Unit: 2165

identification fields which when taken together uniquely identify an individual (see figure 4D) , and at least one health care field corresponding to health care data associated with the individual (see figure 4E), and a second data store (see column 7, lines 59-60), the system comprising:

- (a) means for selecting a subset of the plurality of identification fields (see column 11, lines 8-30);
- (c) means for storing in a record in the second data store (see column 3, lines 35-41) the concatenated identification fields (see figure 4D) as the at least one health care field from the selected record of the first data store (see figure 4E.)

Rhodes et al does not teach:

- (b) means for concatenating the selected subset of identification fields.

For this teaching, the Applicant is directed to the remarks and discussions made in claim 1 above, in view of the teachings of Hoover.

As to claim 8, Rhodes teaches a method (see Abstract) for creating a unique alias associated with an individual identified in a health care database (see column 3, lines 35-41, where “health care database” is read on “pharmaceutical care cognitive services management system’s data storage device”), wherein the health care database stores at least one record (see column 8, lines 12-17), each record including a plurality of identification fields which when taken together uniquely identify an individual (see figure 4D), and at least one health care field corresponding to health care data associated with the individual (see figure 4E), the method comprising the steps of:

Art Unit: 2165

- (a) selecting a record within the health care database (see column 10, lines 38-49, where “selecting a record” is read on “locating a patient”);
- (b) selecting a subset of the plurality of identification fields within the selected record (see column 11, lines 8-30);
- (d) storing in a record in a second database (see column 3, lines 35-41) the concatenated identification fields (see figure 4D) as well as the at least one health care field from the selected record of the first data store (see figure 4E.)

Rhodes et al does not teach:

- (c) concatenating the selected subset of identification fields.

For this teaching, the Applicant is directed to the remarks and discussions made in claim 1 above, in view of the teachings of Hoover.

8. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of Hoover, as applied to claims 1-5 and 7-8 above, and further in view of Taub (U.S. patent No. 6,341,267.)

As to claims 6 and 9, Rhodes as modified teaches the processor (see Rhodes, column 2, lines 65-66.)

Rhodes as modified still does not teach wherein the processor performs the step of:  
based on the concatenated identification fields and the at least one health care field of each record of the second data store, analyzing longitudinal, historical records of individuals using individual-level linking methodologies.

Taub teaches a behavioral matching method for individuals (see Abstract), in which he teaches wherein the processor performs the step of:

based on the concatenated identification fields and the at least one health care field of each record of the second data store, analyzing longitudinal, historical records of individuals using individual-level linking methodologies (see column 4, lines 35-41, and column 21, lines 48-60.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rhodes as modified, by the teaching of Taub, because including include wherein the processor performs the step of: (v) based on the concatenated identification fields and the at least one health care field of each record of the second data store, analyzing longitudinal, historical records of individuals using individual-level linking methodologies, would enable the system to carry out longitudinal and historical analysis of a patient, his/her medication background, and the recommended pharmaceutical actions (e.g. prescription drugs), to anticipate the reactions or outcome, of for example a particular prescription drug on the patient, based on the longitudinal and historical data analysis of the patient and comparing the results with data from patients with similar medical backgrounds.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of art with respect to methods and systems of gathering and storing data in databases in general:

Patent/Pub. No.	Issued to	Cited for teaching
US 6,249,768	Tulskie, Jr. et al.	Longitudinal Analysis in Healthcare Systems.
US 6,317,700	Bagne	Analysis of Longitudinal Associations.

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (571) 272-4078. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

November 28, 2006



**Tony Mahmoudi**  
Patent Examiner  
Art Unit 2165  
Tel. (571) 272-4078  
Fax (571) 273-4078

[tony.mahmoudi@uspto.gov](mailto:tony.mahmoudi@uspto.gov)